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Atty Dkt. No.: 10030416-1
USSN: 10/698,195

REMARKS

In view of the above amendments and the following remarks, the Examiner is requested to allow claims 1-10, 13-15, 22, and 24-29, the only claims pending and under examination in this application.

Claim 1 has been amended to recite an algorithm and an identifying step. Support for the former change appears throughout Applicants' specification, for example at page 15, last paragraph and page 28, first paragraph. Support for the latter change appears in the preamble of original Claim 1. Claims 11, 12, 16-21, and 23 have been cancelled. New Claims 24-29 have been added. Support for these claims can be found in the specification, particularly beginning at page 23.

No new matter has been added.

Interview Summary

Applicants wish to thank the Examiner and his mentor for extending the courtesy of a personal interview to Applicants' representative, Richard A. Schwartz, on July 19, 2006.

The Examiner suggested adding an identifying step in Claim 1. Potential amendments to Claim 1, including adding a recitation of an algorithm or recitation of depurination susceptibility, were discussed. The Examiner acknowledged that the rejection under 35 U.S.C. § 103(a) should have been phrased as Shannon et al. in view of Chee et al.

This account is believed to be a complete and accurate summary of the interview as required by 37 C.F.R. § 1.133. If the Examiner believes that this summary is inaccurate or incomplete, Applicants respectfully request that the Examiner point out any deficiencies in his next communication so that Applicants can amend or supplement the interview summary.

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Claim Objections

Claims 3-9 were objected to under 37 C.F.R. § 1.75(c) for allegedly not further limiting Claim 1 upon which the claims ultimately depend.

The Examiner asserted that the specification defines "the phrase 'full length synthesis probability measure,' with no alternative meanings, as the likelihood that a given probe sequence will be fully synthesized using the particular probe synthesis protocol." Office Action at page 2 (emphasis added). Therefore, the Examiner considered that Claim 3 is a reiteration of Claim 1.

Applicants respectfully direct the Examiner's attention to the paragraph bridging pages 22 and 23 of the specification. This paragraph indicates that an *in situ* array synthesis protocol is only an example of a possible synthesis protocol. In this regard, also see page 17, first complete paragraph. As such, the phrase *in situ nucleic acid synthesis protocol* in Claim 3, does not reiterate the phrase *full length synthesis probability measure* in Claim 1. This objection may be withdrawn.

Claim Rejections – 35 U.S.C. § 112, second paragraph

Claims 4-9 and 22 were rejected under 35 U.S.C. § 112, second paragraph for alleged indefiniteness. This rejection is respectfully traversed.

The Examiner asserted that the word *evaluation* in Claim 4 is indefinite for not reciting steps or "what exactly is involved." Office Action at page 3.

Claims are not read in a vacuum. Definiteness of claim language must be analyzed, *inter alia*, in light of the specification. MPEP § 2173.02. The specification is replete with information regarding the meaning of *evaluation*. See, for example, page 22 *et seq*.

The Examiner asserted that "the method steps only cite a method for evaluating a candidate probe for depurination susceptibility" without showing how to identify a suitable probe.

Claim 22 is in Jepson format. As such, the preamble elements are impliedly known in the art, including any method steps required for probe identification. MPEP § 2129 (III). The improvement step represents Applicants' invention, and is read in conjunction with the implied method steps. Therefore, Applicants need not recite how to identify a suitable probe.

Withdrawal of these rejections is respectfully requested.

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Claim Rejections – 35 U.S.C. § 102

Claims 1-3 and 10 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Shannon et al. (US Patent No. 6,251,588) (hereinafter "Shannon"). This rejection is respectfully traversed.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

The Examiner asserted that Shannon "teaches a method of identifying a sequence for use as a probe based on hybridization and complementarity [sic], as required by the limitation of claim one for determining a full length synthesis probability measure" Office Action at page 4.

Applicants submit that the method of Claim 1 is not based on hybridization and complementarity, as would be readily determined by reading the claim in light of the specification. During examination, pending claims must be given their broadest reasonable interpretation consistent with the specification. MPEP § 2173.05(a). To view Claim 1 as requiring hybridization and complementarity is improper because such a view is wholly inconsistent with the specification.

Furthermore, present Claim 1 recites that a full length synthesis probability measure is determined via an algorithm. Shannon does not disclose the use of an algorithm. Therefore, because Shannon does not identically disclose each and every element of Applicants' claims, there is no anticipation.

Withdrawal of this rejection is respectfully requested.

Claim Rejections – 35 U.S.C. § 103(a)

Claims 13-15 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Chee et al. (US Patent No. 5,837,832) (hereinafter "Chee") in view of Shannon. This rejection is respectfully traversed.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation either in the cited references themselves or in the knowledge generally available to an art worker, to modify the reference or to combine reference teachings so as to arrive at the claimed method. Second, the art must provide a reasonable expectation of success. Finally,

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the prior art reference must teach or suggest all the claim limitations (MPEP § 2143). The teaching or suggestion to arrive at the claimed method and the reasonable expectation of success must both be found in the prior art, not in Applicant's disclosure (MPEP § 2143 citing with favor, *In re Vaeck*, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991)).

At the personal interview, the Examiner acknowledged that this rejection should have been phrased as Shannon in view of Chee et al. The Examiner asserted that Shannon does not teach a method of producing arrays of at least two probes, one of which is produced according to the method of Claim 1. Chee et al. was cited for allegedly disclosing producing arrays containing at least two different probes, in an effort to overcome the deficiency of Shannon.

However, as Applicants have pointed out in the § 102(b) rejection, *supra*, Shannon is deficient by virtue of being based on hybridization and complementarity and for not determining via an algorithm a full length synthesis probability measure. Chee does not teach or suggest anything that would remedy these deficiencies.

Accordingly, for at least the reason that the combination of cited documents does not teach or suggest all of the elements of Applicants' claims, there is no *prima facie* obviousness. Withdrawal of this rejection is respectfully requested.

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CONCLUSION

Applicants submit that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone John Brady at (408) 553-3584.

The Commissioner is hereby authorized to charge any underpayment of fees associated with this communication, including any necessary fees for extensions of time, or credit any overpayment to Deposit Account No. 50-1078, order number 10030416-1.

Respectfully submitted,



Date: July 27, 2006

By: _____

Richard A. Schwartz
Registration No. 48,105

Date: July 27, 2006

By: _____

Bret E. Field
Registration No. 37,620

AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599

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